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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,859	10/31/2003	Liang Fang	NOR-1148	9345
<div>37172      7590      05/31/2007</div> <div>WOOD, HERRON &amp; EVANS, LLP (NORDSON)</div> <div>2700 CAREW TOWER</div> <div>441 VINE STREET</div> <div>CINCINNATI, OH 45202</div>				
			<div>EXAMINER</div> <div>TALBOT, BRIAN K</div>	
			<div>ART UNIT</div> <div>1762</div>	<div>PAPER NUMBER</div>
			<div>NOTIFICATION DATE</div> <div>05/31/2007</div>	<div>DELIVERY MODE</div> <div>ELECTRONIC</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/698,859

Applicant(s)

FANG ET AL.

Examiner

Brian K. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The amendment filed 3/20/07 has been considered and entered. Claims 1-11 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In light of the amendments filed 3/20/07, the 35 USC 112 second paragraph rejections have been withdrawn. The 35 USC 102 rejections over Henninger (4,736,704) and Bok (5,266,349) and the 35 USC 103 rejection including these references have been withdrawn.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Smith et al. (5,747,102) or Ciardella et al. (5,505,777).

Smith et al. (5,747,102) teaches a method and apparatus for dispensing small amounts of liquid material. A valve is opened to dispense a stream of material through an orifice of a

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nozzle. The stream of material is broken into droplets by rapidly closing the valve. A uniform film can be formed from the droplets (abstract, col. 6, lines 20-50 and col. 11, line 45 – col. 12, line 8). The dispensing head can be manipulated in an X,Y and Z direction (col. 15, lines 4-45).

Ciardella et al. (5,505,777) teaches a computer controlled viscous fluid dispensing system. A dot generator is supported for motion in an X,Y and Z axes generates a jet of viscous material on the circuit board (abstract). The solenoid produces a rapid volume displacement which causes the jet of adhesive to be rapidly ejected from the nozzle. The jet breaks away as a result of its own forward momentum and forms into a dot on the upper surface of the circuit board (col. 4, lines 1-7). The viscous material dispensed can include an encapsulant (i.e. a conformal coating) (col. 9, lines 60-65).

### ***Claim Rejections - 35 USC § 103***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (5,747,102) or Ciardella et al. (5,505,777) in combination with Hynes et al. (6,447,847)

Smith et al. (5,747,102) or Ciardella et al. (5,505,777) fail to teach specifically recite that the viscous material can be a conformal coating.

Hynes et al. (6,447,847) teaches a conformal coating system wherein the dispensing mechanism is moveable in the X,Y and Z directions as well as rotation about the Z axis (abstract).

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Smith et al. (5,747,102) or Ciardella et al. (5,505,777) dispensing system to dispense a conformal coating of Hynes et al. (6,447,847) with the expectation of achieving a more precise deposition of the conformal coating as well as success with similar viscous materials.

### ***Response to Amendment***

7. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that the prior art rejection failed to teach a “jetting valve comprising a piston” to jet the coating material.

Smith et al. (5,747,102) or Ciardella et al. (5,505,777) clearly teach this limitation as detailed above.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*BKTalbot 5/24/07*

Brian K Talbot  
Primary Examiner  
Art Unit 1762

BKT